

**E
X
P
O
S
I
N
G
M
E
N**

**THE SCIENCE
AND POLITICS
OF MALE
REPRODUCTION**

CYNTHIA R. DANIELS



CYNTHIA R. DANIELS

E X P O S I N G M E N

THE SCIENCE AND POLITICS OF MALE REPRODUCTION

OXFORD
UNIVERSITY PRESS

2006

OXFORD

UNIVERSITY PRESS

Oxford University Press, Inc., publishes works that further
Oxford University's objective of excellence
in research, scholarship, and education.

Oxford New York
Auckland Cape Town Dar es Salaam Hong Kong Karachi
Kuala Lumpur Madrid Melbourne Mexico City Nairobi
New Delhi Shanghai Taipei Toronto

With offices in
Argentina Austria Brazil Chile Czech Republic France Greece
Guatemala Hungary Italy Japan Poland Portugal Singapore
South Korea Switzerland Thailand Turkey Ukraine Vietnam

Copyright © 2006 by Oxford University Press, Inc.

Published by Oxford University Press, Inc.
198 Madison Avenue, New York, New York 10016
www.oup.com

Oxford is a registered trademark of Oxford University Press

All rights reserved. No part of this publication may be reproduced,
stored in a retrieval system, or transmitted, in any form or by any means,
electronic, mechanical, photocopying, recording, or otherwise,
without the prior permission of Oxford University Press.

Library of Congress Cataloging-in-Publication Data
Daniels, Cynthia R.

Exposing men : the science and politics of male reproduction / Cynthia R. Daniels.
p. cm.

Includes bibliographical references and index.

ISBN-13 978-0-19-538254-9

1. Men. 2. Sex role. 3. Masculinity. I. Title.
HQ1090.D36 2006
305.31—dc22 2005027745

Printed in the United States of America
on acid-free paper

EXPOSING MEN

To the memory of my father,

Raymond J. Daniels

... taken from the dance floor far too soon

ACKNOWLEDGMENTS

Like human reproduction, the production of a book is always dependent on the labor of many people. I owe intellectual debt to the many people who have read and often challenged my work, including Janet Golden, Eileen McDonagh, and Nancy Hirschmann. The gender scholars in the women and politics program at Rutgers—Sue Carroll, Drucilla Cornell, Jane Junn, Leela Fernandes, and Mary Hawkesworth—have built an intellectual environment that encourages the questioning of “gender knowledge” and helps to imagine gender equality beyond equality just for women. Without that institutional support, this work would not have been possible.

My undergraduate students at Rutgers—a lively group of critical thinkers—read drafts of chapters and provided me with the questioning that only students brave enough to challenge the accepted knowledge of their professors can provide. I recognize their contribution to the clarity of these arguments. I would like to especially thank Anna Goldfild, one of my undergraduate assistants, for her support of this project. She is a model of organization and often provided support out of enthusiasm for the project, if not always for wages. My graduate students also provided insightful criticisms and challenging exchanges which helped to deepen this work. I would specifically like to thank my research assistants and

the students too numerous to name in my gender seminars who took the time to read and comment on chapters in their development.

A number of research centers at Rutgers, including the Institute for Research on Women and the Center for the Critical Analysis of Contemporary Culture, provided material and intellectual support for a project that often crossed the boundaries of disciplinary scholarship. The vitality of these centers provided me with the ability to transgress boundaries between theory and practice, masculine and feminine, politics and culture.

My editor at Oxford, Dedi Felman, provided the kind of enthusiasm for this project that every author wishes for in an editor. As the manuscript went through various transformations, her insightful comments provided me with critical direction and encouragement and forced me to sharpen the central arguments of this work.

Throughout this book's production, my primary research assistant, Judith de Vries, organized research materials, carefully edited my work, and succeeded at keeping track of multiple versions of each chapter. Imagine a research assistant who combines the precision of a mathematician with the intellectual care and curiosity of a historian and you will have Judith. She has been an ideal "partner" in work, in midnight hours, and in intellectual exchange at some of the best diners in New Jersey.

Outside of academia, I am most indebted to those scientists and advocates who have had the courage and imagination to question "accepted knowledge" about male reproduction despite the personal and professional costs of doing so. They work in labor unions, in state bureaucracies, and in science labs. This book is built upon the foundation of their brave work.

I wrote most of this book while living on a family farm. The daily labor of mucking, hauling, and caring for animals provided a different kind of perspective on the reproduction of all life, both eternal and deeply social, even for the smallest of living beings. I would like to thank Monte, Louie, Ollie, Bonnie, Pete, the hens, and the "Hags" for comic relief.

A book project engenders costs to one's family that cannot be measured in simple time. I hope that my daughters, Katherine and Julia, will benefit from this work in living lives less constrained by what we

think men and women have to be. I thank them for their love and inspiration throughout the writing of this book. My mother, Margaret Daniels, who had to take on the task of both mothering and fathering four children too early in life, provided inspiration in real life. I thank her for that . . . and also for the meatballs. Finally, I thank my life partner, Bob Higgins, who represents what I hope to be the future of manhood—a future where fathers are recognized as true partners in the production and sustenance of human life and where manhood is measured not by an abstract and often damaging notion of masculinity, but by each person's true humanity.

CONTENTS

- 1** Introduction 3
- 2** Powers of Conception 11
- 3** Dropping Sperm Counts
The Science and Politics of Male Reproductive Health 31
- 4** Commodifying Men
The Science and Politics of Male Infertility and Sperm Banking 73
- 5** The Children Men Father
The Science and Politics of Male-Mediated Fetal Harm 109
- 6** Reproducing Men 157
- Notes 171
- Bibliography 219
- Index 245

EXPOSING MEN

INTRODUCTION

At the turn of the twenty-first century, news stories reported a dramatic drop in sperm counts worldwide. Other stories warned of increasing rates of reproductive cancers in men, a sharp rise in the number of baby boys born with genital deformities, and a decline in the male-to-female birth ratio. Stories of Gulf War veterans, like Vietnam veterans before them, reported soldiers with high rates of infertility and soldiers fathering babies born with bizarre, often fatal, childhood disorders. News accounts noted the striking growth of the multimillion-dollar sperm bank industry in the United States, where male seed was stocked, packaged, and sold on the open market as if it were just another market product. Like few times before in history, stories of men's reproductive disorders publicly exposed the private reproductive troubles of men.

Such stories of men suffering reproductive disease and disability were disturbing not only because they suggested possible men's health problems but also because they flew in the face of traditional ideals of male reproduction. Ideally, men are virile, capable of impregnating women and producing their own biological children. Ideally, men are relatively invulnerable to harm, able to withstand the hazards and risks of the public world, and capable of denying the pains of the human body and the suffering of others. Ideally, men are the protectors of women, children,

and the nation, capable of fighting wars, accepting threats of bodily harm, and shielding others from external risk. Ideally, men are the providers for children, distant from the daily work of child care so that they may earn the resources needed for children's economic well-being. The man who fulfills these functions is a worker, a soldier, a father, a self-sustaining man, dependent on no one and needing neither the protection nor the assistance of others.

Images of men suffering reproductive ailments confounded these ideals by revealing the needs and vulnerabilities of the male reproductive body. If men were as vulnerable as women to the harms of the outside world, if the male reproductive system was equally damaged by the toxins of war and work, and if men, through sperm, could pass on harm to the children they father, then how were we to justify the ideal of men as superior in strength and as the protectors and providers of women and children? Public exposure of men's private reproductive troubles threatened to throw into question not just the health of the male body but these deeper ideals of masculinity as well.

Exposing Men examines how such ideals of masculinity have skewed the science of male reproductive health and our understanding of men's relationship to human reproduction. It argues that such ideals are double-edged, for while they perpetuate assumptions about the superior strength of the male body, they lead to a profound neglect of male reproductive health and a distorted view of men's relationship to human reproduction. It looks at the conditions under which male reproductive health needs have emerged on the public scene at the turn of the century, the charged public responses to such exposure, and the implications of these for how we think about not only men's relationship to human reproduction but also broader social relations between men and women.

Assumptions of reproductive difference have historically presumed a differential division of reproductive labor between men and women. This division of labor presumes not just biological difference but differences in the social functions that men and women play in both human reproduction and society at large. Men impregnate; women gestate. Women's investment in reproduction is long-term; men's is fleeting.

Women produce eggs and milk; men produce “throwaway sperm.” This reproductive division of labor, presumed to be imprinted in biology, is often used to justify different capacities and temperaments for men and women. Women breed, nurture, and conserve human life; men rule the world, often at the expense of human life. If women are more caring and men more tactical in human relations, it is because men and women perform different functions in the reproduction of the species.

Such assumptions may seem antiquated in a time when social movements and feminist scholarship have challenged gender inequalities in nearly every realm of human life. Men have been increasingly drawn into the work of family and child care as women have moved into the masculine worlds of work and politics. Feminist scholars argue that even the grouping of bodies into just two sexes—male and female—distorts a more complex biology of sexual differentiation. Yet while such critiques seem ubiquitous, deeply embedded in the collective consciousness remains the assumption that, in the end (or beginning), the biological functions that men and women perform in reproduction are beyond social contestation.

Exposing Men is a book not just about men’s reproductive health but about, in addition, reproductive difference. I am not arguing for a denial of all biological differences between men and women in reproduction—in gestation, lactation, or even the hormonal differences between the sexes—but that these have taken on social meanings far beyond biology. I do not argue that men and women play equivalent roles in the reproduction of the species but that these differential roles have been highly exaggerated. Indeed, denying all biological differences between men and women would get us no closer to a system of gender equity than their exaggeration. But I do argue that men and women are more similar than different in their contributions to reproduction and that assumptions of reproductive difference have been used to justify social, political, and economic inequalities between men and women. I argue that until assumptions of reproductive difference are challenged, gender inequities for both men and women will continue.

Exposing Men is also a book about the paradoxes of masculine privilege. It argues that such assumptions of reproductive difference do not

just privilege but burden men. The scholarly literature on the politics of reproduction has focused almost exclusively on the costs to women of assumptions of reproductive difference—of the disproportionate burdens women bear in human procreation and caregiving. Yet men pay a price as well. Is it privilege that we neglect ailments like male infertility in the interest of maintaining illusions of male virility? Is it privilege to spend the bulk of a lifetime in dreary or dangerous work, separated from their children, in order to perpetuate ideals of men as providers? Is it privilege to man the front lines of war while women provide primary care for children? Is it privilege to ignore the hazards of both work and war to the male reproductive system to maintain the illusion of men as invulnerable? Although men may enjoy the economic and social advantages of assumptions of reproductive difference, they pay a high price for such advantage as well.

In this age of war and political retrenchment, of rollbacks in affirmative action and challenges to women's reproductive rights, it is not only difficult but also, some might say, politically problematic to write a book about the suffering of men. But only through recognition of the vulnerabilities of men can gender injustices be transformed. We must see, and believe, evidence of male weaknesses and vulnerability. We must see, and recognize, men's intimate connection to human reproduction. Only then can we achieve a more equitable system of gender relations for both men and women.

Reproductive Masculinity

The chapters to follow examine these questions through the lens of male reproduction. Central to this study is the concept of reproductive masculinity—a set of beliefs and assumptions about men's relationship to human reproduction. Reproductive masculinity can be defined in terms of four interrelated elements: First, men are assumed to be secondary in biological reproduction. Although both men and women contribute essential genetic material to conception, women's role in gestation, birth, and lactation presumably renders men secondary in human reproduc-

tion. Second, men are assumed to be less vulnerable to reproductive harm than women. The male reproductive body is seen as less susceptible to the hazards of the world than the female reproductive system. The science of andrology—the study of male reproductive health—has historically been and remains marginalized. Third, men are assumed to be virile, ideally capable of fathering their own biological children. Although reproductive technologies and medical interventions make it possible for infertile men to become fathers, the infertility of men is still understudied, a source of personal shame, and shrouded in comparative secrecy. Fourth, men are assumed to be relatively distant from the health problems of children they father. Birth defects in children, miscarriage, and reproductive disorders are most often still traced to women's and not men's exposures to drugs, alcohol, and environmental and workplace toxins. Despite a growing body of scientific evidence that suggests otherwise, men remain uninformed about how their toxic exposures can affect both pregnancy and the children they father.

Each of these elements of reproductive masculinity has a social history and has increasingly come under social contestation. The following chapters examine the history of each of these assumptions, the conditions under which each has come to be challenged, the social and political resistance to such challenges, and the implications of these assumptions for how we understand men's and women's relationship to human reproduction.

Chapter 2, "Powers of Conception," examines the first element of reproductive masculinity—the assumption that men are secondary in biological reproduction. It visits the history of assumptions about the male role in reproduction, from the ancients through the twentieth century. The male role in biological reproduction has been highly contested. This chapter charts these contestations through the scientific discovery of sperm in seminal fluid (in the seventeenth century) and the debates that discovery produced in the scientific and philosophical communities. Some argued that sperm contained the entire preformed being, ready to be implanted into the uterus. Others argued that "seminal worms" played no substantive role in procreation and simply "excited" the egg into development. Such debates were the result not just of the limits of

science but of competing cultural assumptions of masculinity and femininity that cast men as either primary or peripheral to biological reproduction. In the twenty-first century, the recognition of men's and women's equal genetic contributions to biological reproduction has clarified but not resolved questions about reproductive difference between the sexes. Instead, such debates have shifted onto new grounds of hormonal gender difference.

Chapter 3, "Dropping Sperm Counts," examines the second element of reproductive masculinity—the assumption that the male reproductive system is less vulnerable to the harms of the outside world than the female reproductive system. It explores the historical neglect of andrology, produced by the need to disguise the weaknesses of the male body, which continues today. It looks into these questions by examining the evidence of a dramatic drop in sperm counts, as well as reports of the increase in male reproductive diseases and disorders at the turn of the twenty-first century.

Chapter 4, "Commodifying Men," examines the third element of reproductive masculinity—the assumption of male virility—by studying the historical neglect of male infertility and the rise of the sperm banking industry in the United States. It traces the transformation of the secretive practice of artificial insemination in the nineteenth and early twentieth centuries into the public, multimillion-dollar sperm banking industry. It explores how racial politics (which sought to use artificial insemination for eugenic purposes), market forces (which sought to profit from these efforts), technological innovations (which made it possible to increase rates of success), and social movements (for reproductive rights) have pushed male infertility into public light. Such forces seem to at once reaffirm the ideal of men as fathers even as they expose the reproductive "failings" of those men seeking infertility services.

Chapter 5, "The Children Men Father," examines the fourth element of reproductive masculinity—the presumption that men are more distant from the children they father. Historically, research into the field of paternal fetal harm has faced formidable barriers, with most finding the scientific evidence of male-mediated fetal harm simply unbeliev-